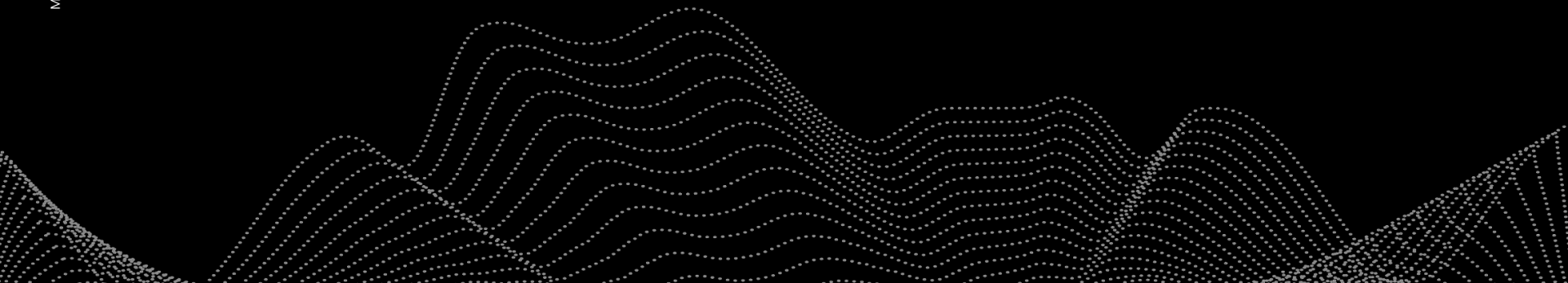




The PCE's call to action on native ecosystem weeds

Angela Brandt



A tremendous investigation

- A personal introduction
- An overview
- 9 chapters
 - 7 recommendations
- *233 pages*
- >25,000 exotic plants introduced
 - ca. 3,000 growing wild
 - ca. 1,800 naturalised
 - 334 regulated pests
 - 380 environmental weeds

Space invaders:

A review of how New Zealand manages weeds that threaten native ecosystems



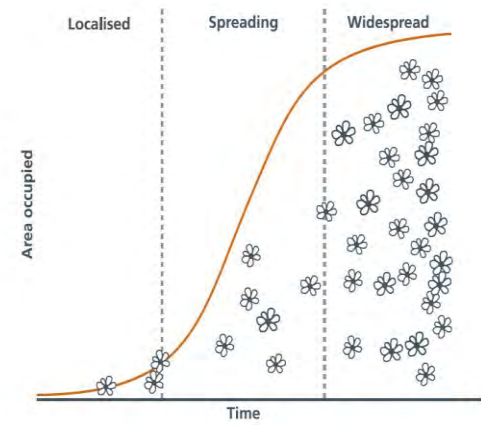
November 2021



Parliamentary Commissioner for the Environment
Te Kaitiaki Taiao a Te Whare Pāremata

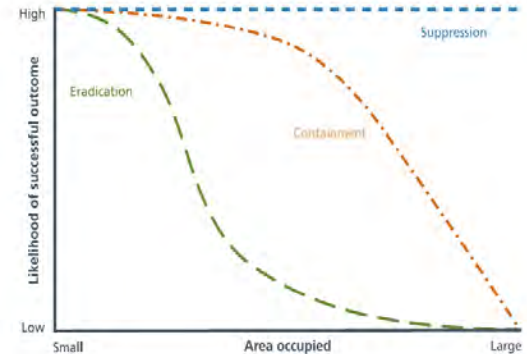
Touching on the breadth of the report

1. Introduction – scope
2. Plant invasion ecology – current state
3. Future threats
4. What do we know?
5. Prioritising which weeds to manage, where & how
6. Regulations for exotic plants
7. What happens in practice – who's involved
8. Local communities in action
9. Recommendations



Source: PCE

Figure 2.5: The area occupied by a naturalised plant species invading a new region can be small at first but then grows quickly as the species begins to spread.



Source: PCE

Figure 5.2: Area occupied by a weed has a major bearing on the choice of management options. For instance, successful eradication is more likely for weeds only occupying small areas but may still be justified for a more widespread weed if it is known to be causing considerable harm.





Aim to answer these questions:

- *Are the ecological risks posed by exotic plants to the integrity of NZ's native ecosystems adequately known?*
- *Are these ecological risks then adequately understood by the organisations and individuals charged with managing exotic plants in native ecosystems?*
- *Do the organisations and individuals charged with management have the information, skills and resources necessary to do a good job?*
- *Are they making sensible strategic choices about where resources get spent given the nature of emerging and future challenges?*
- *Is the regulatory system fit for purpose in light of the above?*
- *Are all organisations, groups and individuals coordinated (and incentivised) in their efforts to manage the right exotic plants?*



Recommendations

1. Clearer direction from Ministers
2. Joint leadership from MPI & DOC
3. Joint National Policy Direction (NPD) focused on native ecosystem weeds
4. Joint NPD could form part of current NPD or stand on its own
5. Policy requires iwi & hapū engagement and minimum content
 - National priority weeds – expert input, coordinated management & surveillance
 - Manage emerging weeds – surveillance
 - Coordinate national & regional efforts
6. Single, authoritative, publicly accessible database
7. 'Emerging risks' team to scan for & coordinate management of new weeds

What role can we play?

- *Can we fill gaps where risks aren't known?*
- *Can we communicate risks better?*
- *Can we make information, skills and resources more available?*
- *Can we better enable good strategic choices?*
- *Can we inform changes to the regulatory system?*
- *Can we build more effective partnerships and networks?*

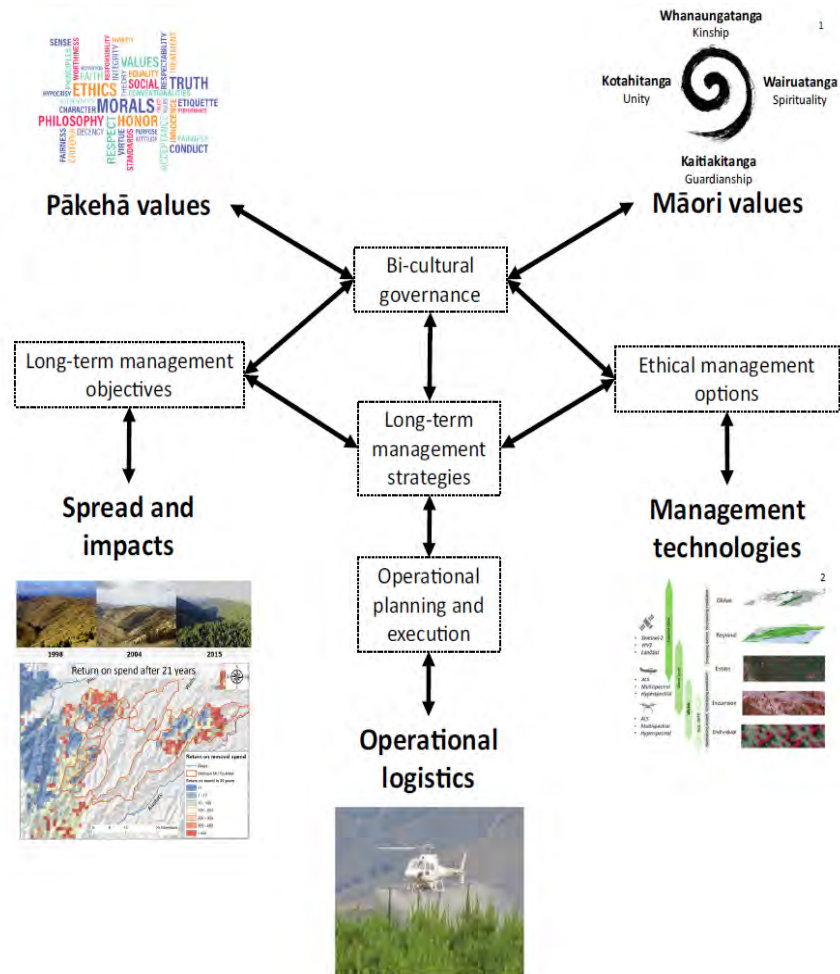
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What can we do to help make these recommendations become reality?



Working collectively

- National Biocontrol Collective
- National Wilding Conifer Control Programme
- Questions about weeds in Survey of Rural Decision Makers



Strategies for management

- Risk assessment
- Detection methods
- Control techniques
- *What if...?*



Pip and Mewhai, scent detection dogs being trained to sniff out *Phytophthora agathidicida*

Pūtaiao Issue 10

November 2021



Adult leaf beetle

Weed Biocontrol: What's new? Issue 100



Getting the best use out of information



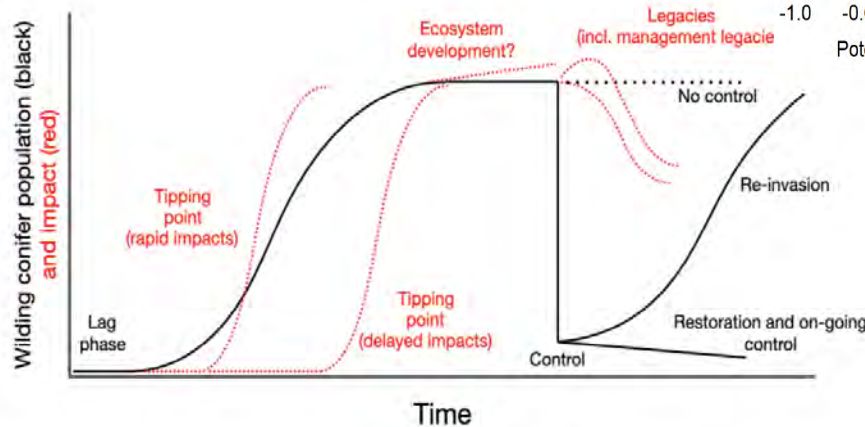

New Zealand National
Vegetation Survey Databank

<https://datastore.landcareresearch.co.nz/gl/dataset/policy-brief-evidence-synthesis>

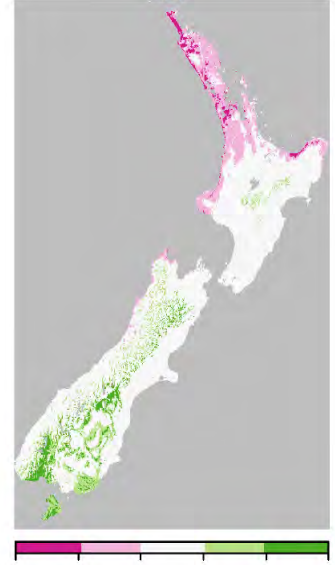
MacLeod et al. 2022. <https://besjournals.onlinelibrary.wiley.com/doi/full/10.1002/pan3.10328>

Future focus

- Where are known weeds going to pop up next?
- Is the job done after we've controlled a weed population?



Pinus radiata



-1.0 -0.6 -0.2 0.2 0.6 1.0
Potential distribution change

Araucaria heterophylla



-1.0 -0.6 -0.2 0.2 0.6 1.0
Potential distribution change

Etherington et al. 2022.

<https://dx.doi.org/10.20417/nzjcol.46.14>

Dickie et al. 2022 preprint.

DOI: [10.22541/au.162428605.59992740/v3](https://doi.org/10.22541/au.162428605.59992740/v3)





*Thank you
Tēnā koutou katoa*

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Additional information

Testimony to Environment and Primary Production Select Committees (10 March 2022)

<https://www.facebook.com/environmentSCNZ/videos/661932801723434/>



Left to right: Nicola Grigg, Angela Bownes, Adam Griffin, Arnaud Cartier

Nicola and Arnaud in the Honshu white admiral rearing greenhouse

Weed Biocontrol: What's new?
Issue 100

Submissions to these select committees from DOC & MPI (2 June 2022)

<https://www.facebook.com/environmentSCNZ/videos/706334123969101/>